

# **Constructing a digital museum with a large-scale archive for endangered languages**

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# Goals of the Museum

- To design a prototype of the web-based museum for endangered languages and cultures that is easily updatable, and serves as a basis of collaborative research.
- To provide a forum in which the local people can exhibit their language products.
- To encourage the local people to have a wider access to language resources and help them to preserve the language and culture of the local community.

# Design of the Museum

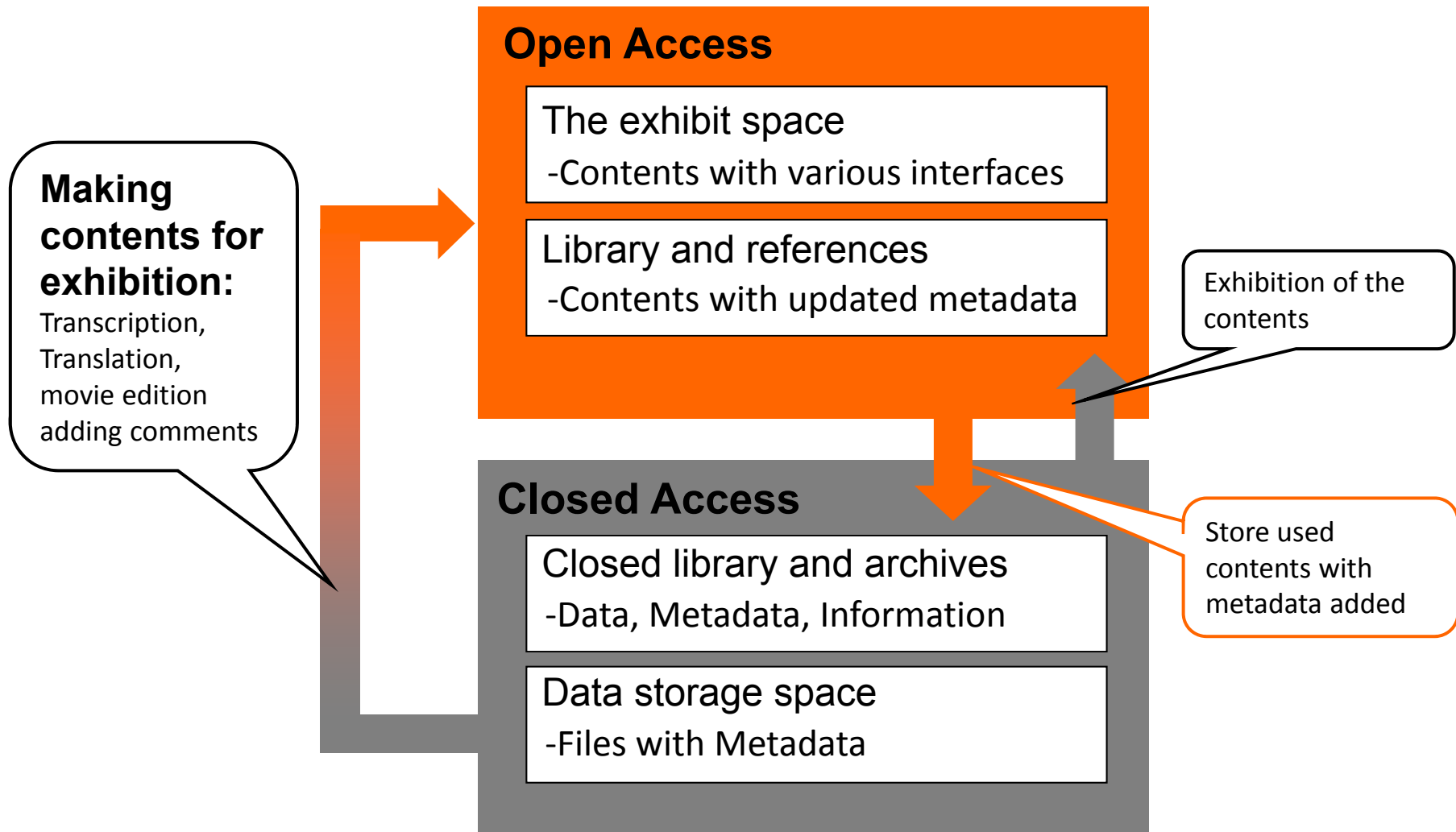
- Four layered web-based museum
  - Open space:
    - The exhibit space
    - Library and references
  - Closed space:
    - Closed library and archives
    - Data storage space

# Spaces with closed access

- Closed library and archives:
  - Accessed only by closed members.
  - Files with transcription and other updated archiving information are stored here.
- Data Storage Space:
  - Accessed only by our research group.
  - Raw data files with basic meta-data are stored here.
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# Why 'museum'?

- Metadata updating through exhibition at the Museum



# Our previous work

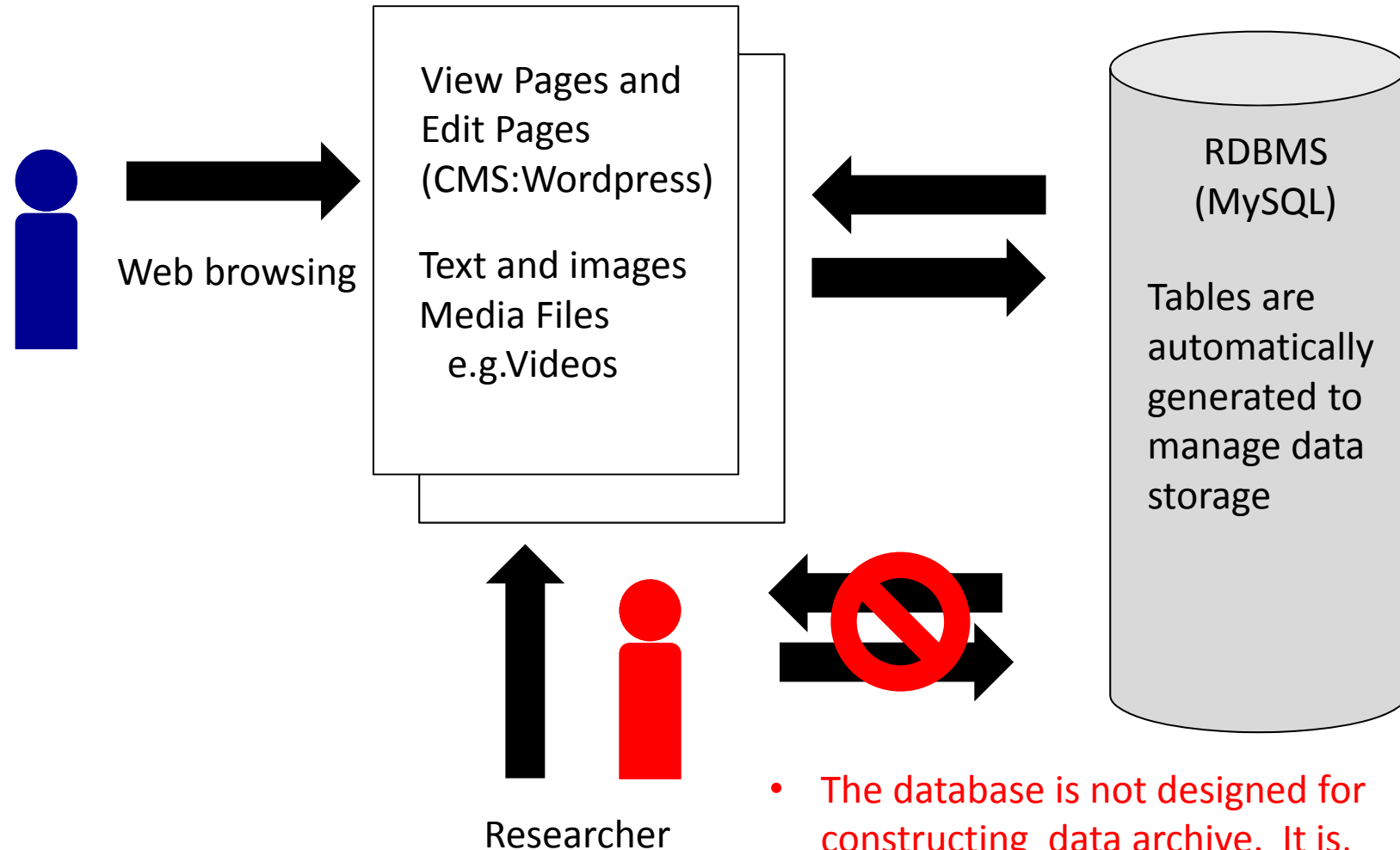
- Prototype of our Digital Museum: Ikema-Nishihara
  - Metadata updating through exhibition
  - Movie contents with subtitles

But

- No online database. External hard disk drives were used to store data.
- Sharing of data was done offline.

[Cf. Takubo, Yukinori \(forthcoming\), Takubo, Y and T. Motoki  
http://Kikigengo.jp](#)

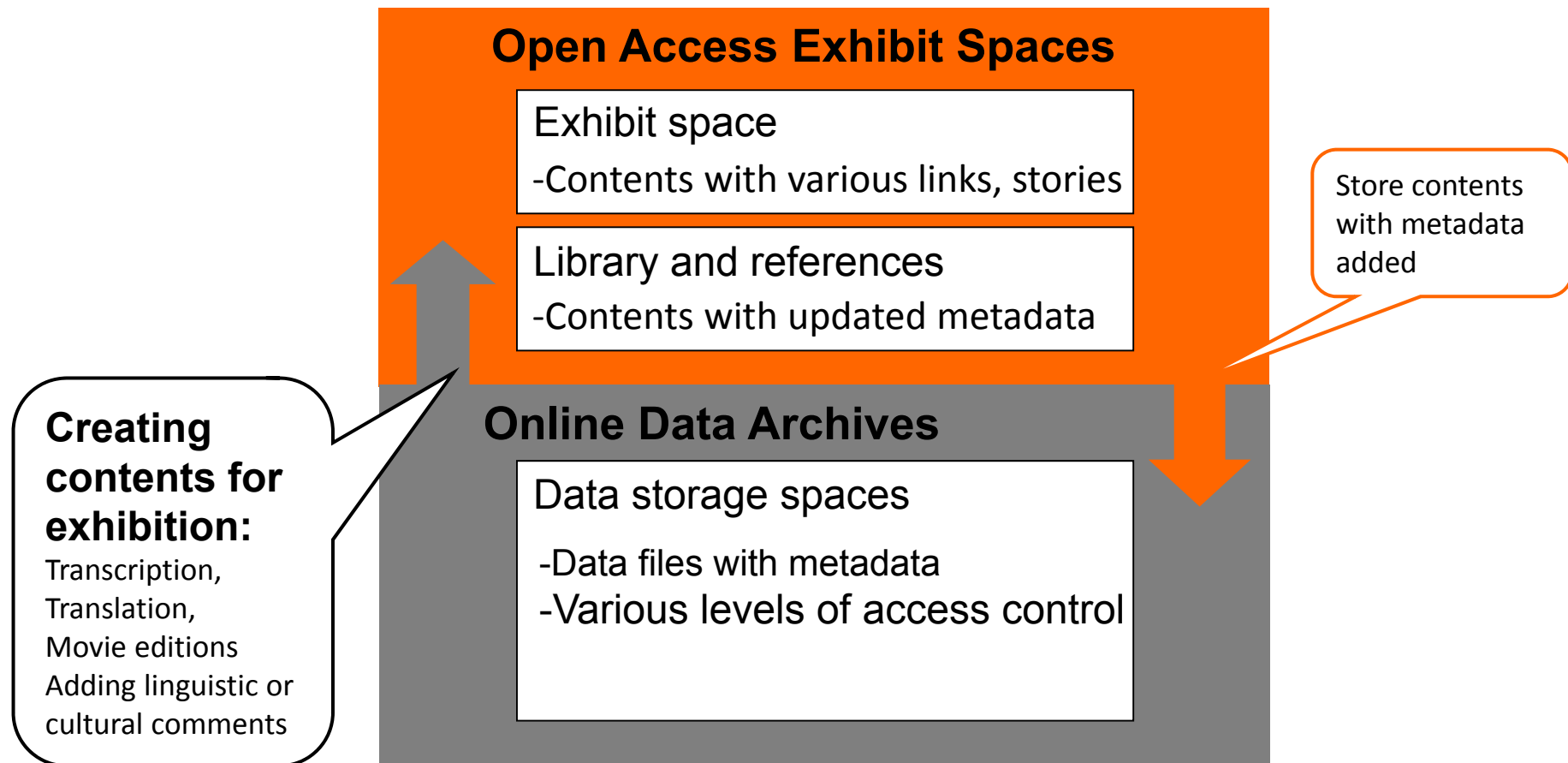
# Our previous work



- The database is not designed for constructing data archive. It is, therefore, difficult to manage individual files.

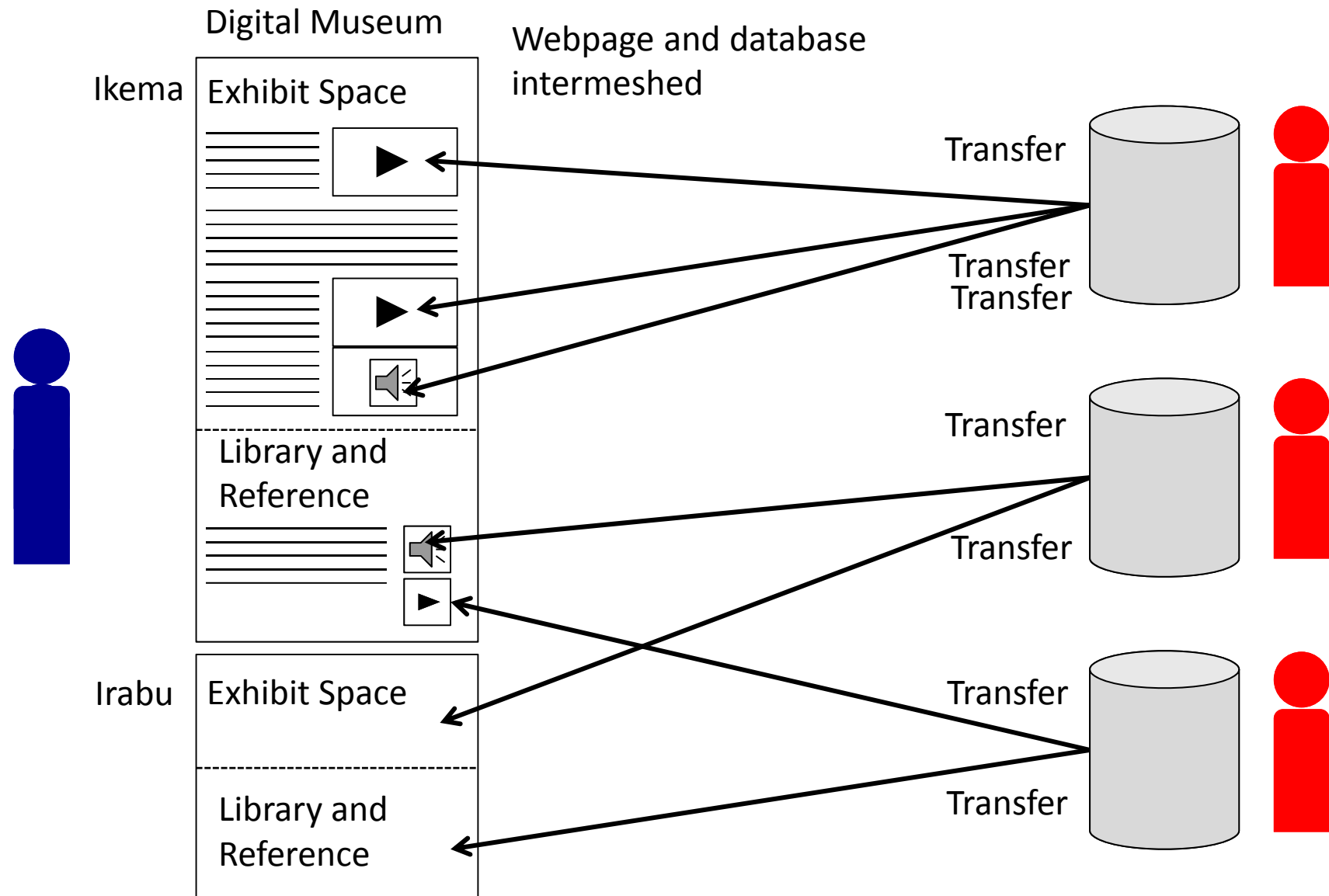
# New feature:

## Adding a large scale online database





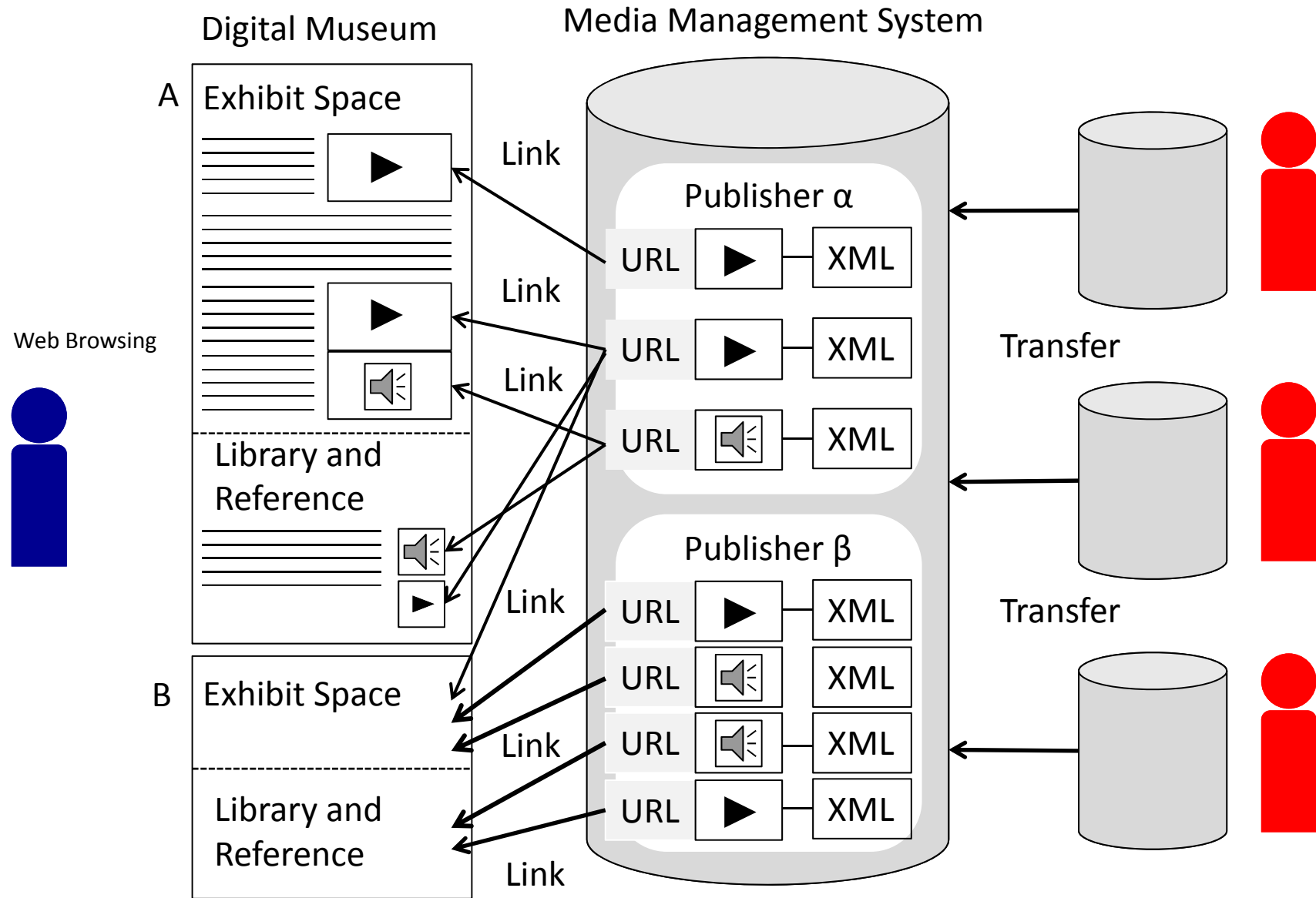
# Implementation before



# **Kaltura: An open source online media management system**

- Publishers
  - can create channels for various purposes, e.g. languages, research groups, etc.
- Media management platform
  - account management, e.g. role restriction
  - Fine-grained access control
  - Media management, media players, streaming
  - Allows various search: descriptions, tags, categories, references

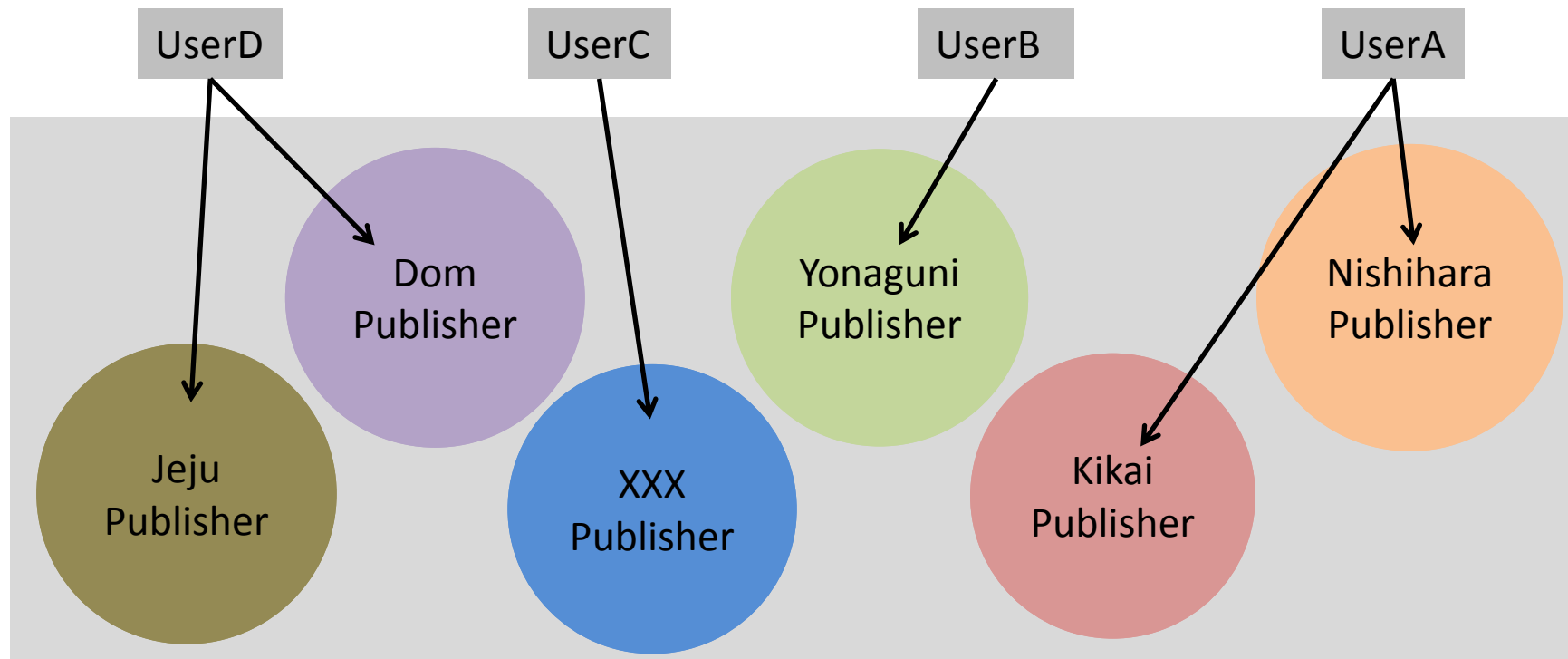
# Implementation after



# Kaltura:

## Access control by Publishers

- A registered member of a publisher A can have access to the media files and the meta data in A, depending on the assigned role of the membership
  - e.g. can upload, edit, or only view and get a link URL of a media file
- Non-members cannot access the contents of a publisher



# Kaltura: Entries

Edit Entry - I0045V\_keitoo7\_kub

Metadata

Thumbnails

Access Control

Scheduling

Flavors

Captions

Advertisements

Related Files

Users

Name:

I0045V\_keitoo7\_kub

Description:

若いころ友達とたきぎとりに山に行った話。

Tags:


tamunu

Categories:

Enter category names

Reference ID:

Entry ID: 0\_a00ctkwh



Play

Preview & Embed

Clip This

Trim This

Creator:

ytakubo@bun.kyoto-u.ac.jp

Created on:

01/02/2015

Type:

Video

Duration:

01:52

Moderation:

Auto approved

Plays:

14

Save

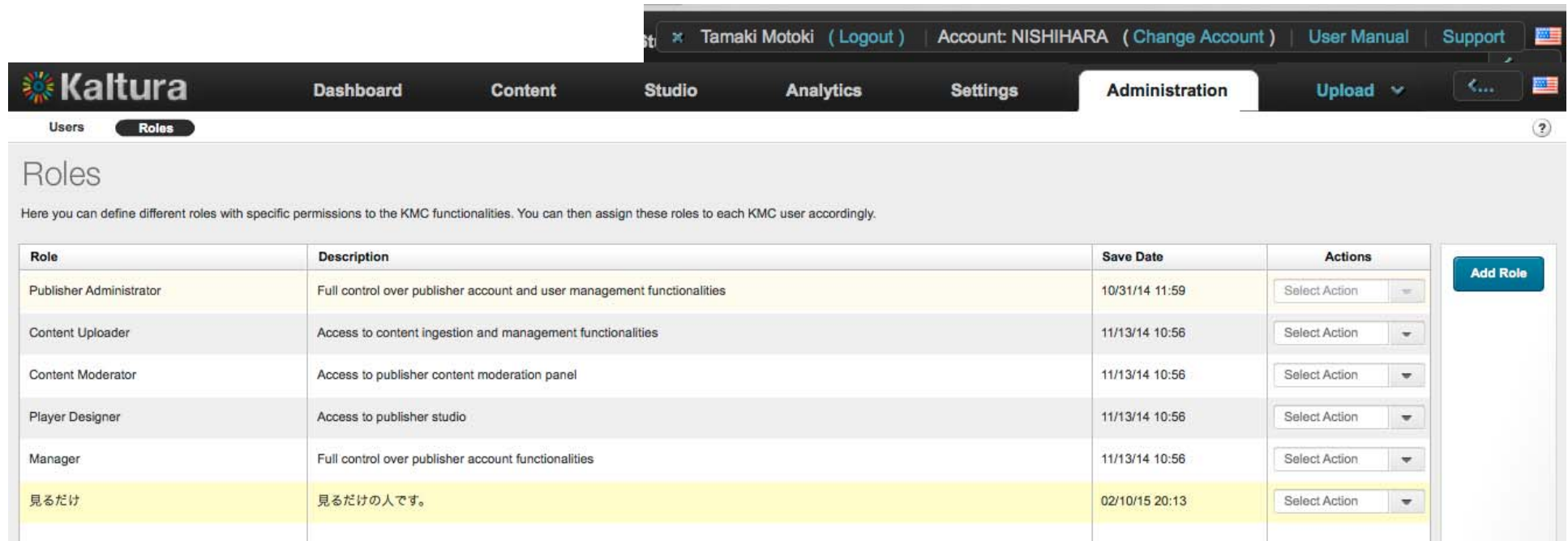
Save & Close

Previous Entry

Next Entry

# Access control

- Closed access by signing into a Kaltura publisher
  - Access control for/over
    - membership (admin, editor, viewer etc.)
    - individual media files or categories over files



The screenshot displays the Kaltura Administration interface. At the top, a navigation bar includes the Kaltura logo and tabs for Dashboard, Content, Studio, Analytics, Settings, and Administration (which is currently selected). To the right of the navigation bar, there are links for 'Upload', a dropdown menu, and a 'Support' link. Below the navigation bar, a sub-header shows 'Users' and 'Roles' (the latter is highlighted). The main content area is titled 'Roles' and contains a descriptive text: 'Here you can define different roles with specific permissions to the KMC functionalities. You can then assign these roles to each KMC user accordingly.' Below this text is a table with the following columns: Role, Description, Save Date, and Actions. The table lists six roles: Publisher Administrator, Content Uploader, Content Moderator, Player Designer, Manager, and 見るだけ (highlighted in yellow). Each role has a corresponding description, a save date, and a 'Select Action' dropdown menu. To the right of the table is a blue 'Add Role' button.

Role	Description	Save Date	Actions
Publisher Administrator	Full control over publisher account and user management functionalities	10/31/14 11:59	Select Action
Content Uploader	Access to content ingestion and management functionalities	11/13/14 10:56	Select Action
Content Moderator	Access to publisher content moderation panel	11/13/14 10:56	Select Action
Player Designer	Access to publisher studio	11/13/14 10:56	Select Action
Manager	Full control over publisher account functionalities	11/13/14 10:56	Select Action
見るだけ	見るだけの人です。	02/10/15 20:13	Select Action

# Kaltura: File Search

- IDs
- Categories
- Key words
- Tags

The screenshot displays the Kaltura interface, specifically the 'Edit Entry' form and the 'Entries' list. The 'Edit Entry' form is at the top, showing metadata for an entry named 'kosodate-dugong'. The 'Tags' field is highlighted with a red circle, showing tags: 'story', 'narrative', and 'hanashiro'. The 'Entries' list is below, showing a table of entries. The 'Filter by Categories' section on the left is also highlighted with a red circle, showing filters for 'kikigengo', 'ikema', 'public', 'rated1', 'rated2', and 'restricted'. The search bar at the top of the 'Entries' list is also highlighted with a red circle, showing the search term 'rated1' and 'kikigengo'.

**Edit Entry - kosodate-dugong**

Metadata

Name: kosodate-dugong

Description:

Tags: story, narrative, hanashiro

Categories: kikigengo, public, hanashiro

Reference ID:

Entry ID: 0\_c9sz4157

Preview & Embed

Clip This

Trim This

Creator: yskuboi@bun.kyoto-u.ac.jp

Created on: 02/23/2015

Type: Video

Duration: 14:30

Moderation: Auto approved

Plays: 2

**Kaltura** Dashboard Content

St: Tamaki Motoki (Logout) Account: NISHIHARA (Change Account) User Manual Support

Entries Moderation Playlists Syndication

Search Entries

rated1 kikigengo

Filter by Categories

☐ All Categories (No Filter)

☒ kikigengo

☐ ikema

☐ public

☒ rated1

☐ rated2

☐ restricted

Thumbnail	ID	Name	Type	Plays	Created On	Duration	Status	Actions
	0_c9sz4157	<a href="#">kosodate-dugong</a>	Video	2	02/23/15 13:58	14:30	Ready	Select Action
	0_e2sa2az3	<a href="#">mimamubuuu_ell</a>	Video	3	02/23/15 12:54	13:51	Ready	Select Action
	0_qjbgwxs	<a href="#">myakuzuki_inzau_s</a>	Video	0	02/23/15 12:01	01:03	Ready	Select Action
	0_tpxyk4qc	<a href="#">080708_nakama</a>	Video	12	01/02/15 14:43	01:32:09	Ready	Select Action
	0_q4mkog0	<a href="#">Sample Big Buck Bunny</a>	Video	1	11/13/14 10:57	00:33	Ready	Select Action
	0_w11hhx38	<a href="#">Sample Kaltura Anime</a>	Video	1	11/13/14 10:57	00:05	Ready	Select Action

Search Categories

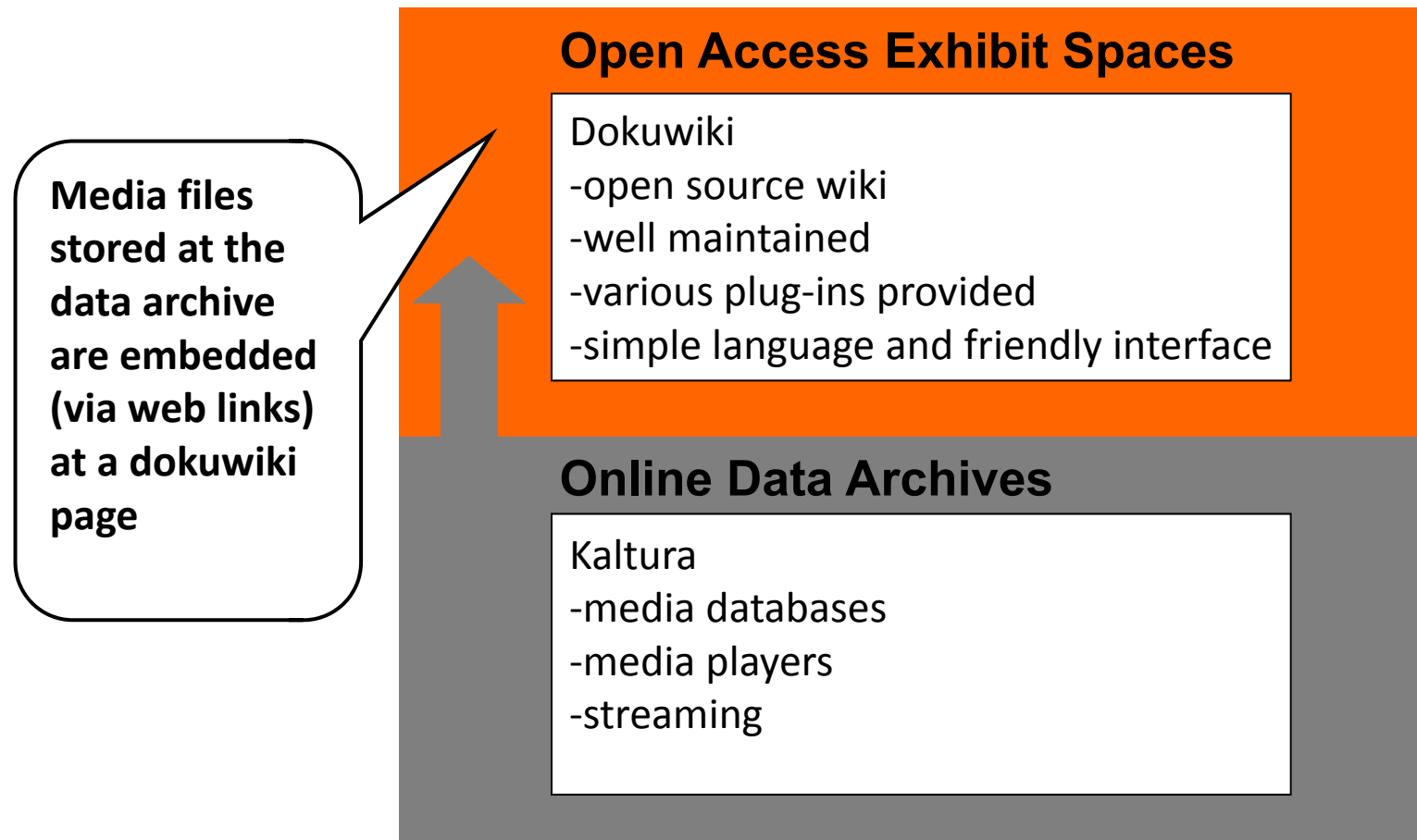
Additional Filters

Bulk Actions

1 1-6 of 6

Show rows: 50

# Current system of the Museum





# Comparison with YouTube

- Can maintain the copy rights of the contents for
  - :privacy protection,
  - :limiting access to sensitive contents such religious rituals.
  - :unwanted editing
- Fine-grained and fine-tuned access control.

# Metadata

### Edit Entry - Kaicho\_Naa

Metadata

Thumbnails

Access Control

Scheduling

Flavors

Captions

Advertisements

Related Files

Users

Name:Kaicho\_NaaTitle


Description:長崎慶長、みどり会会長がさんが名前の付け方を説明している。名づけ。かんぬきCircumstances

Tags:nagasaki × narrative × tukanti ×Participant(s), Language(s), Genre(s), Topic(s)

Categories:public × Nishihara ×Access control, Place

Reference ID:10098EventID

Entry ID: 0\_nutcrqag



Play

Preview & Embed

Clip This

Trim This

Creator:kajita.shoji.5z@kyoto-u.ac.jp

Created on:01/28/2015

Type:Video

Duration:01:01

Moderation:Auto approved

Plays:11

Save

Save & Close

< Previous Entry

Next Entry >

Add related files (detailed metadata)

# Some Limitations

- No workshops: editing of media files must be done offline
- Search is by exact match only
- Still at an experimental stage
- Cannot replace real database (at least for the time being)

# Some applications

- Yonaguni Project: linguists train local people to record and transcribe their speech, or speech by older people
- Miyako High School Project: High school students interview their grand parents and upload the files to a publisher.
- Miyako Project: native speakers of various Miyako dialects make recordings of their own speech and upload the files themselves.

# Summary

Large scale online archive:

- Easy to install and set up
- Separate from the exhibition website
- Fine-grained access control
- Useful for the documentation and preservation of endangered languages

# References

- Kaltura  
<http://corp.kaltura.com/>
- Kikigengo.jp  
<https://www.facebook.com/kikigengojp>
- Takubo, Y. and T. Motoki. The Digital Museum Project for the Languages and Cultures of Ryukyu: The Case of Ikema Ryukyuan. World Oral Literature Occasional Lecture Series. University of Cambridge, Cambridge, UK.<http://www.dspace.cam.ac.uk/handle/1810/226634>  
Link downloadable from academia.edu
- Takubo, Yukinori (forthcoming) The Digital Museum project for the documentation of endangered languages: The case of Ikema Ryukyuan. Festschrift for John Whitman (forthcoming).

# Demonstrations

- [Kikigengo.jp](http://Kikigengo.jp)  
wordpress  
[dokuwiki](#)
- [Database page](#)